

Coursera Capstone

IBM Applied Data Science Capstone

Opening or Investing in a Restaurant in Detroit, Michigan

By: Christopher Liedel, May 22, 2020

Introduction

Detroit, the historic “Motor City,” is a major metropolis with a vibrant downtown district and interesting neighborhood communities. It hosts some of the world’s best hospitals, universities, museums, restaurants, sports arenas, music and theater events in the United States.

Affordable real estate and a talented workforce in combination with the business incentives available in designated opportunity zones, makes Detroit a great place for entrepreneurs and investors alike to call home.

For the start-up restaurateur or the seasoned investor, a first understanding of the big picture is a must. What are the popular dining establishments and how do they rank? What are the most promising neighborhoods for development or investment regarding unmet demand and competition? This project will address these questions and begin to point a way for stakeholder decisions toward maximizing success.

Data

To answer the aforementioned business questions, analysis of Detroit neighborhoods and venues will be conducted through a process of web scraping, data wrangling and the creation of appropriate data frames; clustering and visualization techniques using the following sources:

- Google Maps of Detroit Neighborhoods for list of neighborhood names and areas.
- List of Detroit Zip Codes and geocoordinates: <https://www.public.opendatasoft.com>
- Foursquare API Developer Access: <https://foursquare.com> . For exploring venue data related to dining establishments, their popularity and ranking.

